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CLASSIFICATION OF GRAIN INTO GRADES

By J. C. F. MERRILL,
President, Board of Trade of the City of Chicago.

State Inspection

The practice of classifying grain into grades, more commonly called inspection of grain, is distinctly American in its origin. In the year 1858 the Board of Trade of the City of Chicago created a department for the classifying of grades numerically according to specified requirements of color, quality and general condition, and at the same time certifying to those grades. This same general scheme, with small changes to meet local conditions, spread throughout the country, greatly facilitating trade between widely scattered markets and individuals. State inspection of grain also had its beginning at Chicago, it being established by the State of Illinois in 1871. Missouri, Minnesota, Indiana and Kansas followed in turn. A brief digest of the laws of the five states will be helpful to a correct understanding of the practice:

Illinois. (Revised statutes of 1895.)

Warehouses divided into three classes (licenses required from Circuit Court of the county—bond filed in Class A). No grain to be delivered from a warehouse unless inspected by a duly authorized inspector of grain.

Railroad and Warehouse Commissioners can put inspectors in those elevators where the proprietors store their own grain with that of others to prevent any undue advantage being taken. Elevator receipts bear on their face statement as to quantity and quality of grain received into store.

Governor, with advice and consent of Senate, appoints chief inspector of every city or county in which is located a warehouse of Classes A and B. To be a disinterested party. But appointment in counties or cities containing warehouses of Class B to be made only on recommendation of Board of Railroad and Warehouse Commissioners.

Chief inspector to have a general supervision of the inspection of grain, under advice and immediate recommendation of the board aforesaid. Chief inspector can nominate to the board assistant inspectors and other employees. Commissioners authorized to make such appointments. Chief and assistant inspectors take oath and give bond.

Chief inspector, assistants, and employees are governed by rules prescribed by the Board of Commissioners, etc., which are to be made to meet the services of inspection, and no more. Board exercises a general supervision over the inspection department, prescribing their respective duties, compensation, etc. Expenses paid from funds collected by the same. Rates of storage to be published by each warehouse of Class A during the first week in January of each year, which rates shall not be increased during the year, except as provided for. No discrimination to be made for the storage of grain. In all places where there are legally appointed inspectors of grain, no proprietor or manager of a public warehouse of Class B can receive any grain, unless same has been graded and inspected. Commission to establish grades. Committee of Appeals provided for, and their decision is final. (This committee consists of three, to which owners of grain may appeal the classification made by the inspector.)

Missouri. (Revised statutes of.)

Board of Railroad and Warehouse Commissioners. They appoint a chief inspector for two years. He has a general supervision of the inspection of grain, under the immediate direction of the board. Certain warehouses designated as "public." License. Bond. No discrimination in storage of grain, but charges to be uniform. Grain received at public warehouses to be inspected and graded by a duly authorized inspector. No grain to be delivered from a public warehouse unless it be inspected. (Various other provisions analogous and some identical with those of Illinois.) Chief inspector nominates deputies and such other employees as may be necessary (provision as to salaries, etc.). Commissioners establish the grades of grain. Commissioners can subpoena witnesses. (Attachments for contempt of courts.) (Weighmasters provided for.)

Minnesota. (Revised Laws.)

Elevators located at St. Paul, Minneapolis and Duluth, and other points in the State, which are now or may hereafter be designated as terminal points, in which grain is received for storage in bulk, and that of different owners mixed together, or so stored that the identity of the different lots or parcels is destroyed, shall be public warehouses, known as terminal warehouses. License. All grain to be inspected on receipt. All grain received at a terminal elevator to be inspected and graded by a State Inspector, and reinspected in like manner upon delivery from such warehouse. Charges of same paid by warehousemen and added to the storage. Minneapolis and Duluth grain inspection. Boards provided for two years' service. The "Minnesota" grades established by these two boards. They appoint a chief inspector for two years. Deputy inspectors provided for; deputy inspectors of St. Paul, Minneapolis and Duluth styled "chief deputies."

Inspectors to inspect and grade all grain received at or shipped from any terminal warehouse, whether in car or boatload lots. Appeal to nearest

Board of Grain Appeals is provided for. Not necessary to have grain stored, upon giving proper notice, etc. Weighmasters provided for. All moneys coming into State treasury through this means are appropriated to the salaries of this department. The Inspection Boards were formerly known as the Board of Appeals.

Indiana. (Indiana Statutes.)

Board of County Commissioners in any county may appoint inspectors for four years, unless removed—to inspect within said county, when required, salt, beef, pork, flour and hay.

There shall be appointed annually, by the Board of Trade, or other commercial organization, one or more inspectors of grain, or other property for the county where such board is organized, and in case there be no such organization in any county then the judge of the circuit court may appoint such inspectors (oath prescribed). Where there are two or more such organizations in any city, the one whose members deal most exclusively in grain or produce shall make such appointment, and shall provide for his compensation; and for that purpose may fix a schedule of fees to be paid by the owners of such property as may be inspected. Such inspector may classify and determine the grade to which any article of property submitted to his inspection belongs; but where there is a Board of Trade or other commercial organization in such county, it shall have the exclusive authority to fix the grade of property, defining what shall constitute grade numbers one, two, etc., the inspector determining only as to what grade the same belongs. Where there is no such organization in any county, then the grading and rates of compensation adopted by such city nearest the point where such grain or other property is inspected shall govern the inspector in his inspection.

Kansas. (Code.)

Department of record established for inspection and weighing of grain, called State Grain Inspection Department. Such department has full charge of the inspection and weighing of grain in the state at all railroad terminals, public warehouses, or other points within the state, wherever state grain inspection and weighing may be established at the discretion of the chief inspector. The governor appoints a suitable person, with confirmation of the senate, to be known as chief inspector of grain for the State of Kansas; two years' service.

Duties: 1. General supervision of inspection and weighing of grain. 2. Supervise handling, inspection and storage of grain. 3. Establish necessary rules and regulations. 4. To keep proper records. 5. Investigate complaints of fraud in the grain trade. Bond, \$10,000. Chief inspector can recommend to the governor a suitable person as supervising inspector of each city, town or place in the state, where one or more public warehouses may be doing business under the law. They shall visit daily the elevators and railroad tracks, supervising inspection, with a view to securing a uniform

inspection of grain. A supervising weighmaster also to be recommended for similar place. He shall supervise weighings, inspect scales, etc. Assistant inspectors.

The principal primary markets of the country are situated in the states which actively control the grading of grain by legal enactment. The Atlantic seaboard and Gulf cities from which grain is exported, as well as the primary markets of Detroit, Toledo, Cleveland, Cincinnati and Buffalo, established exchange inspection soon after the Chicago Board of Trade put it into effect. The reliability of inspection certificates is of first importance. Primarily, inspectors operated on their own individual responsibility, the certificates of each being valued according to his reputation for ability and honesty. But misunderstandings between sellers and buyers of grain, and a more or less general desire in the trade to trust official commercial standards rather than the honesty of individuals, suggested some established system of inspection, with the result first of exchange inspection, to be followed in the several states mentioned, by legislative enactment, to give to such system the force and security of law.

Uniformity, in a broad sense throughout the country, has been a recognized necessity from the first. In the main the same rules have been adopted and the same standards established in all markets. Local conditions, however, have to some extent dictated differences calculated to meet local needs. These differences, minor in their origin, had a tendency to increase, at least to increase in their effect as the trade became larger, the need of uniform phraseology as well as to recognize the importance of a strict application of the inspection rules.

The Grain Dealers' National Association, which has many hundred members throughout many states, with a strong representation of board of trade and exchange members, together with the Chief Grain Inspectors' Association, set themselves the task of bringing about uniformity of practice throughout all of the states and markets east of the Rocky Mountains. It has energetically continued the work until with very minor exceptions it has become an accomplished fact. West of the Rockies, probably due to the dry harvest season, grain is stored in sacks when threshed and piled in sheds for longer periods, and remains in the sacks until used, even being exported in that way. Its quality is quite unlike that

grown east of the mountains and requires entirely different rules. Grain arriving at its initial market, when graded, is likely to remain of that grade until finally disposed of.

It may lose its identity through being stored in bins with grain of like grade and quality, to be inspected out of store of the same grade when shipped, or used, or if susceptible of improvement by cleaning or blending with other lots or parcels, it may pass to a higher grade, or if becoming infested by weevil, or from heating or in any way deteriorates in quality it will be degraded, but as a general statement, when inspected out of store for shipment or use its grade is likely to be found unchanged. Therefore, the bulk of grain in commerce in the United States receives its grade at one of the markets situated in the states having state inspection laws. It is true, that in the aggregate much grain arrives at the seaboard and Gulf cities, which for the first time is graded, but the entire quantity is small in comparison to the total quantity arriving at the principal markets of the Middle West and Northwest. Thus, the security of law is applied as a compelling force in the larger markets, which by reason of their importance, have influenced the creating of standards in less important markets, which through the uniformizing influence of association effort, has given to the grain commerce of the country the practical effect and result of inspection under state law. Originally, and until within recent years, all grading was done at the side of the car, commonly known as "track inspection." At Chicago, Minneapolis, Duluth, Buffalo and in part at other markets, what is known as "room inspection" has taken its place.

Established customs are not easily overcome, and there is still some difference of opinion as to the relative merits of these methods, but there is no disposition on the part of those who have made the change to return to the older way. The classification of grain into grades is but the expression of expert judgment. Difference in the judgment of different men, when, as in Chicago, fifty or more at times are required, constitutes the variations sometimes complained of as amounting to inefficiency. It will readily be seen that fifty men working singly and apart from each other, may differ in instances to a degree which those less expert may recognize; hence, any system which gets away from the judgment of individuals, and in its place puts the combined judgment of several

of equal experience and ability, may fairly be held to be an improvement. Track inspection is the judgment of an individual. Room inspection is the combined judgment of several. Room inspection has the added advantage of laboratory aid when it is needed, as in determining the percentage of moisture, or of mixture with other grain, or any of the several conditions which require careful analysis and exact determination. Frozen moisture in grain is difficult to judge even approximately under favorable conditions, but wholly impossible to determine by one whose sensibilities are benumbed through exposure. The judgment of an expert inspector, who has been on the tracks several hours in the early morning with a zero temperature, is practically of no value in determining the moisture content of new crop, uncured frozen corn. The laboratory test, so easily accomplished under the room system, is exact. The efficiency of the room method rests upon exactness in sampling the cars, for the inspectors fix the grade of the car, as represented by the sample taken from it for that purpose.

The capability of the samplers to judge of variations found in different parts of the same car, requires that they also shall be expert judges of quality. With laboratory aids, and with the presence of several inspectors to render combined judgment, there is small chance for error in grading. But with cars loaded full, even to the roof, a most common occurrence, it is impossible in every instance to secure a true sample, one which accurately represents the quality of the entire carload. The track inspector is equally handicapped when cars are so loaded; therefore errors due to this cause, which is the chief one and responsible for more mistakes than any other, are not greater under the room method. The railroads are responsible in a large measure for this difficulty. They require loading to a given weight in accordance with the capacity of the car, usually to within ten per cent of its marked rating. Wheat and other heavy grains can be so loaded and leave enough room for accurate sampling, but oats, especially in years when the test weight per bushel is light, gives the inspection departments much trouble. Within the experience of the writer the minimum carload has mounted from sixteen thousand pounds to ten per cent below the sixty, eighty and one hundred thousand pound cars respectively, which comprise mainly the equipment of all roads at the present time. Railroad tariffs provide for minimum

load of ten per cent below marked capacity of cars. To avoid payment of a penalty, when necessary to do so, cars are loaded full. Railroad tariffs should provide usual tariff rates on such weight as cars may contain when properly loaded for thorough sampling for grading purposes.

These and kindred difficulties of the inspection departments pertain entirely to the "in-inspection," that is, the grain arriving from the country to be inspected for the first time. The "out-inspection," that is, grain loaded at market centers for shipment, does not involve the same difficulties. It is sampled as it runs into the car or vessel, its true quality thus being easily noted. Occasional error where the volume of business is large must be expected, yet mistakes are few in number when compared with the magnitude of the business done. Last year in August the receipts of oats at Chicago were above one million bushels per day; to this add receipts of all other grains, amounting in all to approximately two thousand cars per day, and the importance of the function of grain inspection as carried on in the several markets of the country where it is practiced becomes evident.

Its value to the producer and to the consumer alike is apparent. It was said a few years ago by an Englishman of prominence in the grain trade, that of all the inventions of human ingenuity in the grain business, the American system of grading is the greatest. I have said that it is distinctly an American institution. Canada is the only country which has fully adopted it. Nearly all foreign countries prominent in the exportation of grain, handle it, as it is done in our Pacific states, in bags. Some of these countries have adopted it in part, and whenever they shall have adopted the method of handling and storing grain in bulk, it will of very necessity be also adopted. The Australian government and also that of South Africa, have made a formal investigation of our methods within the current year. Sir Thomas Price, Commissioner of Harbors and Railways for the Transvaal, made a tour of this country in the early months of this year for this purpose, inspecting at Chicago and at country stations in Illinois terminals and country elevators. He remarked to the writer that our system was most complete, and our advancement from the older method of handling in bags marvelous. In foreign markets commerce in grain is carried on in contracts known as "rye terms," the final adjustment

of which is a decision of a committee which determines if the commodity is of the quality contracted for.

While this business necessarily is carried on with honor on the part of the buyer, yet it is well known that he rarely gets the worst of the trade. The seller can never know the final outcome of the transaction until the arrival of the grain and the action of the committee. Many bitter complaints are made by sellers on this side, of their treatment in this regard on the other side of the Atlantic.

Because the foreign buyer of grain on "rye terms" has the advantage of the sellers, he naturally objects to buying on American terms, which are "Loading inspection certificate final." American sellers of grain abroad, for reasons stated, almost without exception, refuse to sell on foreign terms. But the foreign buyer is notoriously a buyer of the lower priced article. If he be offered standard quality grain with a representation that it will undoubtedly arrive in safe condition, and at the same time is offered an "off grade" at a little less price, even though he be told that the risk attending the shipment of it should be considered, that its safe arrival cannot be promised, he will, almost without exception, buy the cheaper article. And if he be told that he can insure safe arrival as to condition for less than half a cent per bushel, he will decline to incur even so small an expense and assume the risk himself. With full and fair warning, he makes the contract, and when it results unsatisfactorily to him, or more likely to his customer to whom he sells "to arrive," much and loud complaint is made about "American certificates," and talk will be heard of "posting" the market from which the grain was exported and which certificates the grain. The writer, acting in an official capacity, has had occasion to inquire into and investigate foreign complaints about American grain, and with just the result as to facts outlined above. It is not claimed that our business practices are always free from regrettable incidents. That would be improbable. It is but fair to say that foreign buyers are as much at fault as are sellers to them on this side. The major part of the complaints made relate to winter and spring shipments of maize or Indian corn. From the beginning of the exportation of this cereal to within a space of ten years, the United States had so large a surplus of this grain that the larger portion of, indeed practically all that was sold abroad, was of the

previous year's crop, well cured and qualified to bear shipment with safe arrival assured, as to condition. Foreign buyers confidently relied upon it to do so. Our maximum of overproduction was reached in the year 1896, at which time we had several hundred millions of bushels of previous crop corn on hand at the beginning of winter, and the price for number two, which is the standard contract grade, sold as low as nineteen and one-half cents per bushel. Since that time our home consumption has steadily and rapidly increased, and notwithstanding we have also increased our production until the last crop, that of 1910, exceeded three thousand million bushels as against two thousand millions at the time of the low prices referred to. Practically speaking, there is now no previous year crop corn on hand in this country on December 1. The effect of this is that the foreign buyers, as well as the home dealer, must of very necessity, if he buy corn at all, take from the new crop uncured, moist corn, unfitted as yet to bear prolonged shipment, especially across the ocean. It would appear that the United Kingdom and European buyers are slow to appreciate these simple facts, and because of successful purchases of former years continue to buy uncured corn with confidence. The buyer is fully advised of the risk he assumes and he is plainly told that only artificially dried corn will take the place of the dry corn of summer, but as this adds materially to the cost, he buys the lower priced grade and takes the risk. And, as before stated, when the purchase does not turn out right he complains bitterly, and asserts that our inspection system is faulty. Indeed, the same English gentleman, quoted herein, as complimenting our system of grading, now expresses his belief that our practices have become so very reprehensible and uncertain that the federal government should assume the function of inspecting grain.

If the foreign buyer would insist upon buying on the basis of uniform inspection rules, and would use care in buying those grades which will safely bear shipment, or when buying new crop corn would do so on a specified moisture content of not above seventeen per cent in winter, and fourteen per cent in spring months, he would, as shown by experience, have no trouble, the safe arrival of the grain being thus assured. Moisture content certificates are now obtainable in all markets. The United States Government maintains laboratories at all shipping centers, and nearly all

exchanges likewise possess them. Shippers may use either. The government renders the service free. With the advent of summer the trouble disappears, nature having completed the cure through the natural drying of the corn as it reposes in the crib of the grower unshelled. But, by way of emphasis, as stated, the foreign buyer persistently prefers to buy cheaper corn, cheaper because of the higher moisture content. The fault is his own. He may eliminate that of which he complains by buying a higher grade of grain, that which has been kiln dried to a safe shipping condition. It is a mistake, in view of these and other facts, to attach too much importance to complaints of this nature. There is small reason for our representatives at Washington asserting, as some of them have, that our commerce is being injured by our exporters. The trouble with the whole matter is not original with them. It has its origin primarily abroad. The foreign buyer can always buy any grade or quality he wants to buy, and he has no excuse which is deserving of respect, when he buys a cheap article, or when he neglects to use ordinary prudence in making contracts. It is a well established principle in economics that profits are in proportion to risks. The risk to be assumed in the export of grain may be reduced to a minimum through buying commodities of standard quality. The complete cure for the ills the foreigner complains of suggests itself.

Proposed Federal Inspection

The movement for federal grading of grain was begun in the fifty-first congress, 1890. Senator Ingalls introduced a bill for uniform standards of classification and grading of grain. Other similar bills were introduced from time to time until, in the second session of congress, on January 19, 1903, Senator McCumber introduced a bill, the provisions of which were much more extensive and minute than any previous bill. Former bills, in the main, sought only to establish standards to be observed by existing inspection departments, in order that uniformity might obtain. Senator McCumber's bill contemplates the assumption by the government of the function itself, seeking to set aside and displace existing state and exchange authority so far as possible.

Senator McCumber has introduced his bill into each successive congress up to, and including, the present congress. A reading of the bill as it now stands will help in fully comprehending its import.

IN THE SENATE OF THE UNITED STATES
APRIL 6, 1911.

A BILL

To provide for the inspection and grading of grain entering into interstate commerce, and to secure uniformity in standards and classification of grain, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of Agriculture shall organize in the Bureau of Plant Industry of his department a section of grain inspection and grading, and shall, according to the rules of the civil service, appoint such experts and other employees as may be deemed by him necessary to carry out the provisions of this act.

SEC. 2. That said secretary shall also appoint, in accordance with the rules of the civil service, at each of the following cities, to wit, Portland, Maine; Boston; New York; Philadelphia; Baltimore; Chicago; Minneapolis; Duluth; Superior; Kansas City, Missouri; Saint Louis; New Orleans; Seattle; Tacoma; and San Francisco, and at such other important centers of interstate trade and commerce in grain as he may consider necessary or proper for carrying out the provisions of this act, one chief grain inspector and such assistants as may be required to inspect and grade grains as herein provided: *Provided, however,* That said secretary may appoint a chief or deputy inspector at such important point of intrastate grain trade as shall furnish sufficient inspection service to fully pay the expenses of maintaining an inspection at such point, when the said secretary is assured that the grain trade interests at such point are desirous of securing federal inspection; but in no case shall such inspector inspect or grade such intrastate grain, except upon request of the owner thereof or his agent.

SEC. 3. That said inspectors shall be paid a salary or compensation to be fixed by the Secretary of Agriculture, which shall correspond as near as possible to salaries and compensations paid other officers or employees of the government performing similar duties.

SEC. 4. That the Secretary of Agriculture shall make all needful rules and regulations governing the inspection and grading herein provided for.

SEC. 5. That said Secretary of Agriculture be, and he is hereby, authorized and required, as soon as may be after the enactment hereof, to determine and fix, according to such standards as he may provide, such classifications and grading of wheat, flax, corn, rye, oats, barley, and other grains as in his judgment the usages of trade may warrant and permit. In the inauguration of the work herein provided he may, if in his judgment the best interest of trade and commerce in said grains require it, adopt the standards of classification and grades now recognized by commercial usages or established by the laws of any state or by boards of trade or chambers of commerce, and may modify or change such classifications or grades from time to time as in his judgment shall be for the best interest of interstate and export grain trade.

SEC. 6. That when such standards are fixed and the classification and

grades determined upon the same shall be made matter of permanent record in the agricultural department, and public notice thereof shall be given in such manner as the secretary shall direct, and thereafter such classification and grades shall be known as the United States standard.

SEC. 7. That from and after thirty days after such classifications and grades have been determined upon and fixed, and duly placed on record as hereinafter provided, such classification and grading shall be taken and held to be the standard in all interstate commerce in grain.

SEC. 8. That it shall be the duty of any railroad company, steamship company, or other firm or corporation or private individual engaged in the transportation of grain destined to any state, territory, or country other than that in which it is received for inspection, or received from any other state, territory, or country than that to which it is consigned, to notify the chief grain inspector at the place of destination of any consignment of grain, within twenty-four hours after its arrival, that a shipment, cargo, or load of grain is in its, their, or his hands and the place of destination of said grain.

That it shall be unlawful for any person herein named to wilfully unload or otherwise discharge any load, cargo, or consignment of grain which has been at any time during the period of its transit an article of interstate commerce and which has not been inspected in accordance with the provisions of this act, until the same has been inspected as provided herein.

Upon the receipt of such notice the said chief inspector shall cause the said grain to be inspected and graded in accordance with the classification and standards fixed by said secretary, and to issue and deliver a certificate of inspection showing such grade and classification in such form as may be provided by rules prescribed by said secretary.

SEC. 9. That it shall be the duty of said inspectors to inspect and grade all grain which at the time of inspecting and grading of the same has been shipped from any other state, territory, or country than the state, territory, or country in which the same is inspected, or is intended for shipment into any other state, territory, or foreign country before the same is unloaded from the car, vessel, or other vehicle in which the same was or is being transported, and to charge and collect from the owner thereof such fees for the inspection of said grain as may be fixed by the Secretary of Agriculture, who shall have the power to fix the rate of charges for the inspection of grain and the manner in which the same shall be collected, and which charges shall be regulated in such manner as will, in the judgment of the Secretary of Agriculture, produce sufficient revenue only to meet the necessary expenses of the inspection service, said fees to be covered into the Treasury of the United States as miscellaneous receipts, in the same manner as for other miscellaneous receipts: *Provided, however,* That such inspector, upon request of the owner or agent of any grain at the point or place where an inspector may be located, whether or not the grain has entered into interstate commerce, shall inspect the same and deliver his certificate therefor in the same manner as other

inspections are made and for the same charge; and whenever the owner of grain at such place shall request and furnish facilities therefor, said inspector shall also weigh such grain and deliver to the owner or his agent his certificate showing the gross and net weight of such grain, under such rules and regulations as may be prescribed by the Secretary of Agriculture.

SEC. 10. That no inspector or deputy inspector of grain shall, during his term of service, be interested, directly or indirectly, in the handling, storing, shipping, purchasing, or selling of grain, nor shall he be in the employment of any person or corporation interested in the handling, storing, shipping, purchasing, or selling of grain.

SEC. 11. That any person interested in any consignment of grain inspected under the provisions of this act may appeal from an inspection made by any assistant inspector to the chief inspector at the point where such grain is inspected, and from said chief inspector to the Secretary of Agriculture. Said secretary shall make all needful rules and regulations to govern appeals.

SEC. 12. That when any grain which having been inspected and certificate of inspection issued hereunder is mixed with any other grain not inspected or with grain which has been inspected and certified at a different grade, the same shall not be shipped out of the state where such mixing is done without being reinspected and graded; any such person or corporation shipping such grain as aforesaid without reinspection shall be deemed guilty of a misdemeanor.

SEC. 13. That the shipment or consignment of any grain aforesaid from any of the places mentioned herein to another state or foreign country without the same being inspected and graded as herein provided is hereby prohibited; but where grain has been once inspected hereunder, and remains unmixed with other grain, the same need not be reinspected at the place from which it is exported: *Provided, however,* That said secretary may, in his discretion, reinspect any cargo of such grain before the same is exported.

SEC. 14. That it shall be the duty of the inspectors and assistants to investigate the handling and weighing of grain inspected by them, and to make such report thereon as the said secretary may require; and it shall be the duty of every person or corporation weighing such grain to allow inspection of such weighing and handling by said inspectors.

SEC. 15. That any person or corporation who wilfully does any act prohibited herein or who wilfully refuses or neglects to do or perform the things required of him under the provisions of this act shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall be punished by a fine in a sum not to exceed five thousand dollars, or by imprisonment not to exceed one year, or by both fine and imprisonment.

SEC. 16. That for salaries and for all other expenses in the city of Washington, or elsewhere, deemed necessary by the Secretary of Agriculture to carry out the provisions of this act there is hereby appropriated, out of any money in the treasury not otherwise appropriated, eight hundred and fifty thousand dollars.

SEC. 17. That this act shall take effect and be in force from and after the first day of January, nineteen hundred and twelve.

There are reasons for believing that the author of this bill has in view what he believes to be the needs of his own State of North Dakota, rather than the question as a whole without taking into consideration its effect upon the entire country. That there is not now, nor has there ever been, a popular or public demand for this legislation may be confidently asserted. It may be fairly doubted, but for the activity of its author, that it would not have been heard of during recent years. There are but three of the surplus grain states which do not have their own primary markets. These being the two Dakotas and Iowa.

The latter state consumes largely of its product, being a large producer of fat cattle and hogs, and also has numerous mills and cereal manufacturing interests of importance. The surplus grain from these three states enters interstate commerce, that of North Dakota naturally going to the two Minnesota markets of Minneapolis and Duluth. It has been claimed by the author of the bill that the people of North Dakota believe that the grain inspection law of the State of Minnesota works a hardship to the farmers of their state. The legislature of North Dakota memorialized the legislature of Minnesota on the subject, but without securing relief; therefore, the desirability of a federal inspection law. It is the belief of those well acquainted with the matter that much aid and comfort has been given the McCumber propaganda by the Department of Agriculture.

Some of the assistants to the secretary have stated to the writer, however, that the department does not desire the full control of inspection of grain throughout the country, provided for in the McCumber bill. It rather desires to be helpful only to the inspection departments of the several states and exchanges where the practice is already established or hereafter to be established. It does not wish to assume the burden of administering in detail so large a work, nor does it feel warranted in interfering so extensively with established conditions, especially without a more general demand that it should do so. The farmers generally have a very imperfect conception of the entire question of grading of grain. It is a well established fact that, notwithstanding they plant, reap and market it, as a class they are not at all expert in closely judging

quality. The proposed enactment has met with small favor by the grain trade. At only two of the primary markets have dealers expressed a preference for it, and in these markets the trade is by no means a unit in favor of it. These markets, St. Louis and Duluth, are, by reason of their geographical situation, so to speak, astride of state lines. The conflict between the local inspectors of the separate states, the certificates of both being used, has brought about petty annoyances and jealousies which would gladly be eliminated if possible, and a cursory view of the problem has suggested a cherished relief in federal inspection.

It should be remembered that federal inspection could be applied only to grain in interstate commerce. By no possibility could the federal authority be imposed on intra-state grain, that moving wholly within a state. As before noted, there are but three surplus grain states which do not have their own markets to which a major part of the product of the state is consigned for sale. Therefore, federal inspection would be inoperative to a large degree, for until grain should have entered interstate commerce, could it be inspected by a federal inspector, if there were such, only on request of the owner. This being unquestionably the case, it is clear that existing departments would continue of necessity.

In some of the states, as in Illinois, for example, public storage elevators require a state license, and the certificates issued by them must be registered by the state registrar, the grading and public warehousing of the grain being the principal features of a general plan calculated to be of great benefit to producers and consumers, as well as to those engaged in merchandising it. It is improbable that any part of this law would be repealed because of federal enactment. When the Interstate Commerce Commission was created none of the states repealed their railroad laws and turned over to that body the regulation of intra-state rail rates, rather the several states became more active in the matter of state control.

Furthermore, grain in interstate commerce and graded under authority of the government would not of necessity remain so. A single example will suffice. If loaded at Chicago, Duluth or any of the upper lake ports for shipment to lower lake cities, being interstate commerce the grain would fall within the jurisdiction of the government, but on arrival at destination would lose its identity on being unloaded and would be at rest within state authority. If at

Buffalo or Ogdensburg it could be then loaded out and shipped to any part of the State of New York, including the great market of New York City, or if at Erie, could be shipped to any part of the State of Pennsylvania, including Philadelphia, and would be intra-state. Thus, its original inspection which the farmer would be most interested in, and its final sale in which the consumer would be equally interested, would both be intra-state, unless, as stated, federal inspection was requested. It may be conservatively stated that not half of the grain in commerce day by day, the country taken as a whole, could be made amenable in matters of inspection to the authority of the general government.

Double inspection would be imposed on a large quantity of grain, inasmuch as present systems would be continued. This, so far as it was applied to the initial grading, would be borne by the farmers, for all expenses incidental to marketing produce is deducted from the price originally paid the producer. And likewise in its application to the final disposition of the grain, if interstate business, the buyer would pay for it in the price. If double inspection was thus applied to all of the grain received and shipped from Chicago alone, it would amount to two hundred thousand dollars per annum at the current rate of fifty cents per thousand bushels.

The objections herein offered to federal inspection of grain, are those of a practical nature. Other objections might with propriety be urged. The objection to paternalism in government has been mentioned in this connection. That the function of government is to govern. That government should keep hands off the business of the country as a competitor and should not in any way interfere with established authority now actively rendering such satisfactory service as can with reason be expected, and far more satisfactory than could be expected of a government department. The people are not willing to cast aside the result of most careful effort covering a period of nearly forty years and substitute therefor an experiment, a new creation of doubtful capability, and of political control. It is the better part of judgment to hold fast to that which is good. At the close of a hearing by the Senate committee on agriculture in February, 1909, its chairman, the late Senator Dolliver, remarked to the writer who had just closed a representation against the McCumber bill. "The more I come to

know about this question, the more I am convinced that it is a matter for business men, and we legislators would better let it alone." The conclusion of Senator Dolliver was based on consideration of the question covering a period of several years, during which, as a member of the Senate committee, he had heard many arguments both for and against. It may well be accepted as a wise and sound conclusion. As evidence that his committee coincided with his opinion, is the fact that the bill was not reported out by it.

Value in Consummating Transactions at Home and Abroad for Present and Future Delivery

The system of grading greatly facilitates the selling of grain for future delivery. This has become so large and so important a feature of grain in commerce that its brief discussion may not be out of place.

Production imposes ownership of the product. This is a simple truth and so commonplace that its importance is generally ignored. Each crop, generally speaking, is a year's supply. And of necessity some one must own, from the time of production to the time of need, the food necessities of the people. Ownership is inseparable from the risk incidental to the fluctuations of price, due to the vicissitudes of the seasons, and therefore is most uncertain. Whoever assumes this risk, if he does it with a knowledge of all known conditions affecting values, renders a great service to society, in helping to carry the food necessities of our ninety millions of people. Each person requires five bushels of wheat per year, as well as other products of the soil. The carrying of this enormous food supply involves responsibilities seldom fully comprehended. It should be remembered that in finality all products of the farm are for the use of the people. If bountiful crops are harvested and plenty fills every granary, prices will fluctuate less than if drought and early frost, or both, operate to diminish the supply, or have the result of scarcity. The Department of Agriculture systematically gathers reliable information about acreage, growing conditions of the crop, percentage of old crop on hand, and at stated frequent intervals publishes it in detail. This information is eagerly sought by all interests, inasmuch as the prosperity of the entire country depends upon the creation of new wealth. It is also a matter of

concern to almost everyone to know if there be a plenty or a scarcity of food necessities; if they will be cheap or dear. This has ever been the basis of transactions of large and, at times, of enormous proportions.

Thirty-six centuries ago Joseph stored large quantities of wheat in Egypt in times of plenty against times of scarcity. Undoubtedly the practice was ancient in his time. In our day the practice of buying and selling for future delivery has not only become a part of the business of every miller and every jobber of grain, but has become the business of a distinct class of men who are willing to take fair risks, based on their knowledge of conditions. Mr. Justice Holmes, of the United States Supreme Court, in a decision says: "*People will endeavor to forecast the future and to make agreements according to their prophecy. Speculation of this kind by competent men is the self-adjustment of society to the probable. Its value is well known as a means of avoiding or mitigating catastrophes, equalizing prices and providing for periods of want.*"

Storage merchants, millers, jobbers and owners generally of any considerable quantity of grain practice more or less, the elimination of the risk of ownership due to market fluctuations, by making hedge sales. Hedge sales are insurance against loss. Having a given quantity of grain on hand and effecting a hedge sale of the same quantity, it is plain that a rise or a fall in the price neither gains a profit or makes a loss. The loss on the grain on hand in event of a fall is offset by the profit in the hedge contract due to its also having declined and conversely. It places a merchant or a miller in the position of having a stock on hand with which to do business and of having insurance against loss. He may buy back any day any part of his hedge which may be needful to offset his sales of that day from his stock.

Hedge sales are always of the standard grade of No. 2, as No. 2 wheat or No. 2 corn. Transactions in millions of bushels, sometimes daily, for foreign account, are consummated in the Chicago market. The United Kingdom and Continental markets are all liberally represented in this business, there being no other market where orders in such quantities can be executed.

This is because of our system of classifying grain into grades, and the storing of graded grain in enormous quantities. As this is

written there is in store in Chicago more than twenty million bushels of wheat. The standards of grade are well known in all foreign markets. The carrying of the grain which enters the commerce of the United States, and to a large degree that also of Europe, results in the selling and buying for future delivery of enormous quantities. As it moves along the highway of commerce it changes ownership many times between the period of production and that of consumption. Each different owner may hedge it, buying back his hedge when he sells the commodity itself. It transpires that the total grain thus sold and bought for future delivery many times exceeds the quantity produced. The same may be said of the currency of the country, the business of the country every day many times exceeding the circulating medium of the country. The United States Government is most active in disseminating all crop information procurable, as well as reporting stocks of previous crops in farmers' hands, thus affording information calculated to influence values, it follows that these reports are anxiously looked for by all holders of food necessities, with the result of more or less change of value. Favorable crop conditions operate to depress values, unfavorable conditions or small remaining stocks having the opposite result.

As with all business carried on in an extensive manner, abuses of greater or less degree accompany it with many regrettable occurrences.

The daily press greatly exaggerates market episodes, treating them in a sensational manner. The great, broad stream of commerce in grain flows silently by with scarcely a thought on the part of anyone about its tremendous volume and importance, but every ripple on its surface is quickly recognized and is featured far beyond its deserts, all for the sake of a sensational article to help make their particular issue popular. This has become a veritable nuisance, and when officers of the exchanges have remonstrated with the managing editors and have asked that the simple facts be printed, they have been told that the public demands something sensational. Reference is made to it here because the exchanges have suffered keenly from this most unwarrantable license of the press. The long time which elapses between production and consumption, between contracts and their performance, makes it extremely important to have men with a knowledge of universal

conditions anticipate the wants of the people and assume the risks of the market. The effect of this service is to render prices more steady and to equalize values.

The proof of this is found in the fact that, before selling and buying for future delivery was so largely practiced, the margin of profit required by those who carried the grain from the time of production to the time of need was much wider than now. Without it the grain trade of the country, as it now is in all other surplus grain producing countries, would be in the hands of a few men of strong financial standing. In fact, in our own country nearly all farm products not traded in on the exchanges for future delivery are so controlled. Perishable articles, such as potatoes, or those of great bulk such as hay, do not lend themselves to trading of this kind. The fresh meat business, tobacco and other less important articles are controlled by trusts.

The system of inspection of grain is a most beneficent one. It is practiced throughout the country with substantial uniformity. As now established, it serves the needs of the people as fully as such a system can.

Existing departments are administered with more direct responsibility to the grain trade of the country than would be possible under federal inspection.

It serves a broad purpose, determining the quality, leaving only the price to be adjusted in consummating transactions. It affords a well determined basis for time contracts. It is an achievement of the grain trade of the United States and should be jealously guarded through strict application of its rules, and cared for as a priceless possession of producers and consumers as well as those engaged in the distribution of farm products.